email: eonochie@uwaterloo.ca

# Education University of Waterloo

2014 - 2018

B.Math, Applied Mathematics, Minor in Cognitive Science

CGPA: 86%

Academic Interests: Theoretical Neuroscience/Biology, Differential Equations, Dynamical Systems, Robotics, Control Theory, Software Engineering, Computational Mathematics, and

Philosophy

## Work Experience Microsoft Corporation

Software Engineer Intern

Redmond, WA

January 2016 - May 2016

Operating Systems Group - Graphics

TBD

# **Microsoft Corporation**

Software Engineer and Program Manager Intern

May 2015 - August 2015

Redmond, WA

Operating Systems Group - Print

Worked on a user facing Windows 10 system application. Dealt with a large class of problems relating to concurrency, inter process communication, customer/competitive analysis, and UI/UX design.

## **Projects**

# Drowsy Alert: Brain Computer Interface

2015

Used a 4-channel EEG (Electroencephalography), as well as signal processing and machine learning algorithms to detect drowsiness in drivers. Worked with a team of 3 electrical engineers at Hack the North.

Sonata: Android 2014

An Android app that allows users to stream and create playlists of songs from YouTube. Decrypted YouTube video encryption algorithm for direct access to the mp3.

StockMe: Android 2014

Stock analytics application that uses technical analysis to rate stocks and provide investment strategies, published on Google Play Store.

## Space Shooter: LibGDX, Android, OpenGL ES

2013

Arcade-style android video game where the player controls a space ship, dodges bullets and battles a wide range of enemy space ships. Published on the Google Play Store with thousands of downloads.

#### Technical Skills

### Programming Languages:

Java, C++, C, Python, Racket/Scheme

### Software Platforms and APIs:

Android SDK, LibGDX, Universal App Platform (Windows 10), SFML, Git, Various Google APIs, Facebook API, LATEX, Maple, MATLAB

#### Activities

## University of Waterloo Teaching Assistant

Teaching assistant for linear algebra

# Hobbies:

Hiking, weightlifting, Quora